Technical Memorandum
for
Site 2 - Fire Training Area
Site 6A - Fuel Calibration Area
Test Pitting Activities

Naval Weapons
Industrial Reserve Plant
Calverton, New York

Engineering Field Activity, Northeast
Naval Facilities Engineering Command
Contract Number N62472-90-D-1298
Contract Task Order 0223/0812

January 2002

TECHNICAL MEMORANDUM
TEST PITTING ACTIVITIES AT SITES 2 - FIRE TRAINING AREA AND 6A - FUEL CALIBRATION AREA NWIRP CALVERTON, NEW YORK

1.0 INTRODUCTION

This technical memorandum presents the findings of test pit excavations, sample collection, and laboratory analysis conducted in June 2001 for Site 2 - Fire Training Area and Site 6A - Fuel Calibration Area at the Naval Weapons Industrial Reserve Plant (NWIRP) in Calverton, New York. The data was collected to better define the existing subsurface soil conditions at these sites. Historic data for these two sites is currently inconclusive as to whether soil contamination remains at these sites. An RFI completed in 1995 found evidence of soil contamination at Site 2, but not at Site 6A. At Site 2, an Air Sparging/Soil Vapor Extraction System has operated seasonally from 1995 to 2001. As of 2001, a petroleum based floating free product layer remains at both sites. The floating free products at the sites are also contaminated with chlorinated solvents. Historical free product remediation systems have reduced the thickness of the remaining product to a level that is no longer recoverable via conventional methods.

This memorandum was prepared under Contract Task Order (CTO) 0223 by Tetra Tech NUS, Inc. (TtNUS), under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62472-90-D-1298 and was conducted to support a Corrective Measures Study (CMS) for the sites.

2.0 FIELD INVESTIGATIONS

This section presents the field observations noted during test pitting activities.

2.1 Test Pit Excavations

Test pit excavation activities were conducted at Site 2 (Fire Training Area) and Site 6A (Fuel Calibration Area) from June 11, 2001 through June 13, 2001. The objectives of the

test pitting activities were to visually identify the nature and extent of soil contamination thought to be present within portions of each site and to obtain samples for chemical analysis.

TtNUS subcontracted Unitech Drilling (Unitech) to conduct the test pit excavations. A backhoe, an operator, and a helper were supplied by Unitech to conduct the excavations and a TtNUS geologist conducted oversight and logging of the pits. Prior to conducting the test pitting activities, underground utilities were located on a utilities diagram supplied by the Navy and the New York State "One-Call" system was notified of planned site activities.

A photoionization detector (PID) and a lower explosion limit/oxygen (LE/LO2) meter were utilized at each test pit to detect volatile organic compounds (VOCs) that may have been present. The TtNUS geologist logged each test pit. Information recorded by the geologist included lithology, waste encountered, volatile organic concentrations, the depths at which waste was found, and any other pertinent observations. Copies of the test pit logs have been included in Attachment A.

Excavated soils were placed on a stockpile adjacent to each test pit. Poly sheeting was placed under any soils that the field crew identified as contaminated (i.e. stained or with elevated PID readings). Soils with no elevated PID readings were placed directly onto the adjacent ground surface. Upon completion, each test pit was backfilled (except FC-TP03) with the excavated soil. FC-TP03 was left exposed for future observations.

2.2 Fire Training Area Test Pits (Site 2)

Five test pits were excavated at Site 2 during this phase of activities. The target depth of each test pit was 12 feet or until groundwater was encountered. The test pit locations were selected based on accessibility and historical information for the site. See the attached sketch in Attachment B for test pit locations.

Test Pit No. FT-TP01

Test pit FT-TP01 was located approximately 10 to 15 feet south of the southern tip of the former concrete fire training ring. This pit was excavated to a total depth of approximately 12 feet below ground surface (bgs). Metal debris, wood fragments, brick and cinder block fragments were encountered within this pit from 1 feet through 5 feet bgs. The soils within this same depth interval were also stained dark black in color. Soils below 5 feet were not stained. While the excavation was open, a few drops of a water and oil mixture were observed to flow toward the bottom of the excavation.

PID readings ranging from 9.5 parts per million (ppm) to 285 ppm were recorded. Also, a petroleum like odor was detected with soils excavated from 1 feet to 7 feet bgs. The soils under the above mentioned debris consisted of mainly fine to medium sand. The odor and PID readings with soils excavated below 7.0 feet bgs decreased to near background levels. The test pit excavation could not be conducted deeper than 12.0 feet due to collapsing sidewalls. Groundwater was not encountered within the excavation, nearby monitoring well data indicate that groundwater may be approximately 15 feet below ground surface. The final dimensions of this test pit were approximately 14.5 feet long by 4 feet wide.

A soil/waste sample was collected from the eastern sidewall of this excavation for chemical analysis (see sample logsheets for details). The sample was collected from an undisturbed area using a stainless steel trowel and was obtained from an approximate depth of 3 feet bgs. A PID reading of 55 ppm was recorded from the sample material. This test pit was backfilled using the excavated material.

Test Pit No. FT-TP-02

Test pit FT-TP02 was located approximately 25 to 40 feet southeast of FT-TP01. This pit was excavated to a total depth of approximately 11.5 feet bgs. Wood debris, brick, and concrete fragments as well as black stained silty sand were encountered within this pit from 0.5 feet to 3 feet bgs. The soils below this depth consisted mainly of fine to medium grained sand with no staining. PID reading ranging from 12.5 ppm to 241 ppm were recorded throughout the excavation. A petroleum like odor was also noted

throughout the excavation. The PID readings and odors associated excavated soils decreased with depth within the excavation. Groundwater was not encountered within this excavation. The pit could not be excavated below a depth of 11.5 feet bgs due to collapsing sidewalls. The final dimensions of this test pit were 14 feet long by 3.5 feet wide.

A soil/waste sample was collected from the northern end of this pit for chemical analysis (see sample logsheets for details). This sample was collected from an undisturbed area and was obtained from a depth of approximately 2.5 feet bgs. A PID reading of 28 ppm was recorded from the sample material. This test pit was backfilled using the excavated material.

Test Pit No. FT-TP03

Test pit FT-TP03 was located approximately 25 to 40 feet southeast of FT-TP02. This pit was excavated to a total depth of 9.5 feet bgs. Black stained silty sand and wood debris were encountered within the pit from 1 feet to 3 feet bgs. Soils below this depth consisted mainly of fine to medium grained sands, with no staining. PID readings ranging from 12 to 58 ppm were recorded throughout the excavation. The excavated material also had a petroleum like odor which decreased with depth. Groundwater was not encountered within this excavation. The pit could not be excavated to a below a depth of 9.5 feet bgs due to collapsing sidewalls. The final dimensions of this test pit were approximately 14.5 feet long by 3.5 feet wide. An analytical sample was not collected from this location. This pit was backfilled using the excavated soils.

Test Pit No. FT-TP04

Test pit FT-TP04 was located approximately 30 to 50 feet west of FT-TP01. This pit was excavated to a total depth of 9.5 feet bgs. Black stained silty sand with a small amount of wood debris and brick fragments were encountered within this excavation from 1 to 4.5 feet bgs. Soils below 4.5 feet bgs consisted mainly of fine to medium grained sand with no staining. The only elevated PID readings recorded within this excavation were found at approximately 1 foot bgs and ranged to a maximum of 2 ppm. No odors were apparent during this excavation. Groundwater was not encountered within this

excavation. The pit could not be excavated below a depth of 9.5 feet bgs due to collapsing sidewalls. The final dimensions of this pit were approximately 14.0 feet long by 3.5 feet wide. An analytical sample was not collected from this location. This pit was backfilled using the excavated soils.

Test Pit No. FT-TP05

Test pit FT-TP05 was located approximately 25 to 40 feet south of FT-TP01. This pit was excavated to a total depth of 9.0 feet bgs. Black stained silty sand with a small amount of wood debris was encountered within this excavation from 1 feet to 2 feet bgs. Soils below 2 feet bgs consisted mainly of fine to medium grained sand with no staining. No elevated PID readings or odors were recorded from this excavation. Groundwater was not encountered within this excavation. The pit could not be excavated below a depth of 9.5 feet bgs due to collapsing sidewalls. The final dimensions of this pit were approximately 15.0 feet long by 3.5 feet wide. An analytical sample was not collected from this location. This pit was backfilled using the excavated soils.

2.3 Fuel Calibration Area (Site 6A)

Four test pits were excavated at Site 6A during this phase of activities. The target depth of each test pit was 5 feet or until groundwater was encountered. The test pit locations were selected based on accessibility and historical information for the site. See the sketch in Attachment B for test pit locations.

The number and location of test pits in the area were reduced from the number originally planned. Several buried utilities were encountered along the edge of the pavement. The active status of the utilities was uncertain, and, therefore, several test pits were not advanced.

Test Pit No. FC-TP01

Test pit FC-TP01 was located adjacent to monitoring wells FC-MW02 and FC-MW02I. This pit was excavated to a total depth of approximately 7 feet bgs. No evidence of debris or waste disposal was encountered throughout the excavation. Excavated

material consisted of mainly fine to medium grained sand. PID reading ranging from 48 ppm to 565 ppm were observed between 0.5 to 7.0 feet bgs. A petroleum like odor was also noticed from the soil excavated within this depth range. Groundwater was encountered in the excavation at a depth of approximately 6 feet bgs. An oily brown floating product (thin layer/sheen) was observed on the groundwater in the excavation within 0.5 hours after completion of the test pit. The initial dimensions of the test pit were approximately 16 feet long by 5 feet wide. Excavating 2 to 1 side wall slopes with a total depth of approximately 5 feet bgs completed the pit. This test pit was initially left open in order to conduct long-term monitoring /sampling activities. However, due to a very heavy rainfall during the evening of June 12, 2001, the pit was found to be nearly full of water on June 13, 2001. As a result, the water in this pit was pumped out and transferred to a temporary storage tank located at the site. The test pit was then backfilled with the excavated material on June 13, 2001.

A subsurface soil sample was collected from this pit for chemical analysis. The sample was collected form the eastern sidewall of the excavation at an approximate depth of 3 feet bgs. The sample was obtained from an undisturbed area of the sidewall using a stainless steel trowel. PID readings of up to 44 ppm were recorded from the sample material. See sample logsheets included in Attachment A.

Test Pit No. FC-TP02

Test pit FC-TP02 was located approximately 75 feet southeast of FC-TP01. This pit was excavated to a total depth of approximately 5 feet bgs. No evidence of debris or waste disposal was observed within the excavation. PID readings were not observed above background. The excavated material consisted of a mixture of sand and gravel and appeared to have been fill material from a previous excavation. Groundwater was encountered within the excavation at a depth of approximately 4.5 feet bgs. No evidence of a floating product or sheen was observed. The final dimensions of this test pit were 14 feet long by 6 feet wide. This test pit was backfilled using the excavated material. An analytical sample was not collected from within this pit.

Test Pit No. FC-TP03

Test pit FC-TP03 was located approximately 50 feet east of FC-TP02. This pit was excavated to a total depth of approximately 6 feet bgs. A few pieces of concrete fragments were observed within this excavation at a depth of approximately 1.6 feet bgs. No other evidence of debris or waste disposal was observed throughout the remaining depth of the excavation. The excavated material consisted of mainly sandy silt and fine to medium grained sand. Elevated PID readings ranging from 108 ppm to 302 ppm were recorded within the excavation from 1.6 to 6.0 feet bgs. A petroleum like odor was also noted from the soils at these depths. Groundwater was encountered within the excavation at a depth of approximately 5.5 feet bgs. A very slight oily sheen was observed on the groundwater table surface during excavation activities. The initial dimensions of the test pit were 18 feet long by 6 feet wide. Excavating 2 to 1 side wall slopes with a total depth of approximately 5 feet bgs completed the excavation. A soil sample for chemical analysis was collected from the southern sidewall of this excavation (see sample logsheets for details). The sample was collected from an undisturbed area using a stainless steel trowel at an approximate depth of 4 feet bgs. This test pit was left open to accommodate long term monitoring and sampling of the area.

Test Pit No. FC-TP04

Test pit FC-TP04 was located approximately 30 feet north of FC-TP03. This pit was excavated to a total depth of approximately 6 feet bgs. No evidence of debris or waste disposal was observed throughout the excavation. The excavated soils consisted of mainly fine to medium grained sand. Elevated PID readings ranging from 84 ppm to 262 ppm were recorded from soils excavated from a depth of 1 feet to 6 feet bgs. Groundwater was encountered within this pit at a depth of approximately 5 feet bgs. Floating product or oily sheen was not observed on the water table at this location. The final dimensions of this test pit were approximately 15 feet long by 4.5 feet wide. This pit was backfilled using the excavated material. An analytical sample was not collected from this location.

2.4 SUMMARY OF FIELD OBSERVATIONS.

At Site 2 - Fire Training Area, a continuous area of stained soils with elevated PID readings was observed. Based on the June 2001 field activities, and historic soil borings in the area, the stained soils cover an area of approximately 90 feet by 150 feet, with a maximum thickness of approximately 5 feet. The estimated volume of these stained soils is 2000 cubic yards. The soil is covered with approximately 1 to 2 feet of unstained soils. Note that the extent of contaminated soils may also extend north under the existing fire training ring, which has not been investigated.

Below this zone on contaminated soils, based on PID readings and visual observation, the underlying soils are not likely to be as contaminated, although groundwater was not encountered. A thin layer of free product (generally 1 inch or less) is known to be present on the groundwater in this area. Groundwater is at a depth of approximately 15 feet.

At Site 6A - Fuel Calibration Area, one or more areas of stained soils with elevated PID readings were encountered. The presence of several underground utilities in the area prevented more extensive test pitting activities. The stained soil was found intermittently and was at a maximum thickness of approximately 5 feet, which is equal to the depth of the water table. The extent of contaminated soil may extend north under the existing concrete pad. During a rain event, the runoff from the concrete pad was noted to discharge in the area of Site 6A. During the event, the groundwater table was observed to rise approximately 3 to 4 feet. A thin layer of free product (generally 1 inch or less) is known to be present at the site.

3.0 ANALYTICAL RESULTS

Four soil samples were collected in June 2001 at NWIRP Calverton, two from Site 2 - Fire Training Area and two from Site 6A - Fuel Calibration Area. The samples were collected of soils that based on visual staining and elevated PID readings, were biased towards areas of contamination. The samples were analyzed by Chemtech for VOCs, semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and TCLP metals. Sample log sheets and chain of custody forms are presented in

Attachment C. Analytical results are summarized in Table and raw - unvalidated results are presented in Attachment D.

3.1 Site 2 - Fire Training Area

VOCs, SVOCs (polynuclear aromatic hydrocarbons - PAHs only), and PCBs were detected in samples from Site 2. Of these detections, only VOCs and PAHs in one of the two samples exceeded NYSDEC TAGM 4046. The VOC TAGM criteria was based on protection of groundwater. As a result, an exceedance would indicate that these soils could represent a continuing source of groundwater contamination.

The PAH detections exceeded the TAGM criteria based on human ingestion of soil under an unrestricted future residential use scenario. Benzo(a)pyrene was the primary chemical of concern, with a detected concentration approximately 7.7 times the TAGM criteria. At this concentration, the unrestricted site risk estimate (residential use) would be in the range of 1x10-5 ICLR. However, the PAH concentrations were similar to (but still slightly higher for benzo(a)pyrene) USEPA Region IX PRGs for the industrial scenario which is more representative of current and planned site conditions, suggesting that site risks would be in the range of 2x10-6 ICLR. The detected PCBs did not exceed Federal and New York State criteria of 1000 ug/kg. Also, the soils would not be classified as a 40 CFR 261 characteristic hazardous waste.

3.2 Site 6A - Fuel Calibration Area

VOCs and SVOCs were detected in the two samples from Site 6A. Of these detections, none exceeded NYSDEC TAGM 4046. This test data confirms data from 1995, that did not find chemical evidence of significant soil contamination at this site. Also, the soils would not be classified as a 40 CFR 261 characteristic hazardous waste. However, floating petroleum products near the water table and groundwater contamination do remain at the site.

TABLE 1
SOIL RESULTS FROM TEST PITS AT SITES 2 AND 6A
NWIRP CALVERTON, NEW YORK

Parameter	FT-TP01-0203	FT-TP02-0203	FC-TP01-0203	FC-TP03-0304	NYSDEC TAGM 4046	40 CFR 261 Hazardous Level	EPA Region 9 PRG - Industrial
VOCs (ug/kg)							
Acetone	37	300			200	NA	>100,000
Methylene Chloride	10	42	5.8	32	100	NA	>100,000
1,1-Dichloroethane	10				200	NA	>100,000
1,1,1-Trichloroethane			17		800	NA	>100,000
Benzene	9.8				60	10,000*	1,500
Ethylbenzene	170	350			5,500	NA	>100,000
Toluene	280				1,500	NA	>100,000
m/p Xylenes	1000	3000			1,200	NA	>100,000
o Xylene	310	2300			1,200	NA	>100,000
SVOCs (ug/kg)							
Naphthalene	710	2500		1200	13,000	NA	>100,000
2-Methylnaphthalene	170	3900		2400	36,400	NA	NA
Acenaphthene	84	540			50,000	NA	>100,000
Dibenzofuran	55	630		260	6,200	NA	>100,000
Fluorene	86	1100	130	270	50,000	NA	>100,000
Phenanthrene	210	2800	54		50,000	NA	NA
Anthracene	48	460			50,000	NA	>100,000
Carbazole	60	330			NA	NA	>100,000
Fluoranthene	160	3200	78		50,000	NA	>100,000
Pyrene	110	3000	42		50,000	NA	>100,000
Benzo(a)anthracene		910			224	NA	2,900
Chrysene		1100			400	NA	>100,000
Bis(2-ethylhexyl)phathalate	74		82		50,000	NA	>100,000
Benzo(b)fluoranthene		730			1,100	NA	2900
Benzo(k)fluoranthene		780			1,100	NA	29,000
Benzo(a)pyrene		470			61	NA	290
Indo(1,2,3-cd)pyrene		120			3,200	NA	2,900
Dibenzo(a,h)anthracene		43			14	NA	290
Benzo(g,h,i)perylene		240			50,000	NA	NA
PCBs (ug/kg)	ND	750	ND	ND	1,000/10,000	NA	1,000
Pesticides (ug/kg)	ND	ND	ND	ND	NA	NA	NA

TABLE 1 (continued)
SOIL RESULTS FROM TEST PITS AT SITES 2 AND 6A
NWIRP CALVERTON, NEW YORK

Parameter	FT-TP01-0203	FT-TP02-0203	FC-TP01-0203	FC-TP03-0304	NYSDEC TAGM4046	40 CFR 261 Hazardous Level	EPA Region 9 PRG - Industrial
TCLP Extract Metals (ug/l)							
Arsenic					NA	5,000	NA
Barium	4140	NA	2790	NA	NA	100,000	NA
Cadmium					NA	1,000	NA
Chromium					NA	5,000	NA
Lead					NA	5,000	NA
Mercury					NA	200	NA
Selenium					NA	1,000	NA
Silver					NA	5,000	NA

Samples were collected from the Fire Training Area (FT) and the Fuel Calibration Area (FC)
Samples were collected in June 2001.
Blank indicates that the parameter was not detected.
NA indicates either not applicable or not available.
ND indicates that there were no detections in the scan.

ATTACHMENT A
TEST PIT LOG SHEETS

TEST PIT LOG

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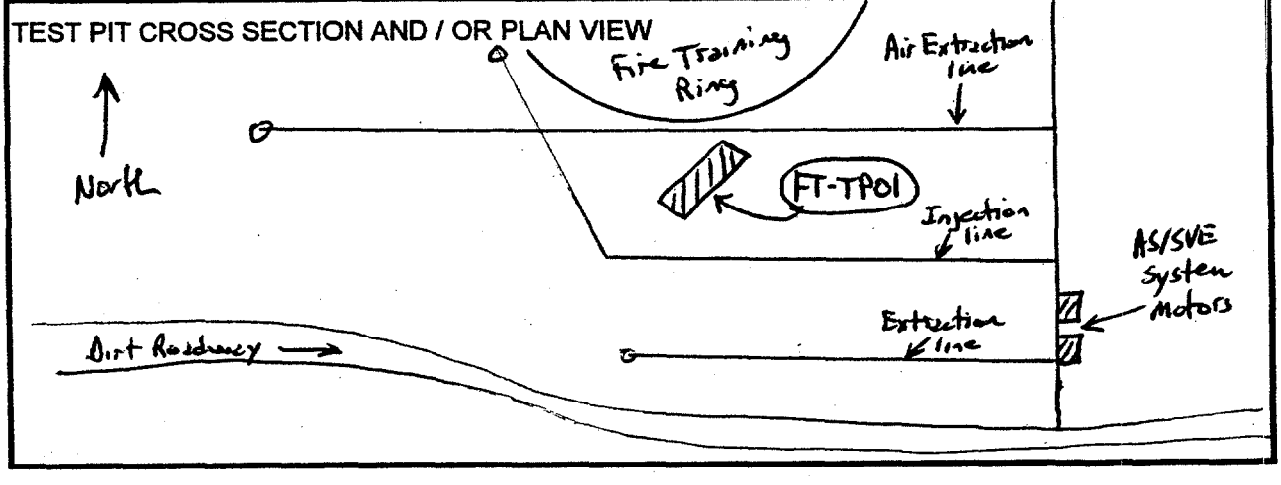
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fire Training Area
TEST PIT NUMBER: FT-TP01
DATE: 6-12-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Brown-Grey Silty Sand with Gravel Fill and Grass/roots		(damp)	0	0
1.0		Mixture of Grey-Black-Brown fine to Medium Sand and metal debris, Brick frags and wood, Cinderblocks, etc.		petroleum odor	161	0
				Strong Petroleum odor (damp)	285	3
5.0		Brown-Tan fine to Medium Sand			38.5	2
7.0		Tan-White fine to Medium Sand		Slight Petroleum odor	33.5	1
10.0		Same as above		"	8.4	0
12.0		Same as above		(damp)	9.5	0
				could not dig any deeper to the sidewalls of Pit collapsing.		

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet within Excavation
- Evidence of contamination observed from 1.0 feet through 12.0 Feet
- Test Pit Dimensions → 14.5 feet x 4.0 feet.

PHOTO LOG: NA →

- Test Pit was back filled

TEST PIT LOG

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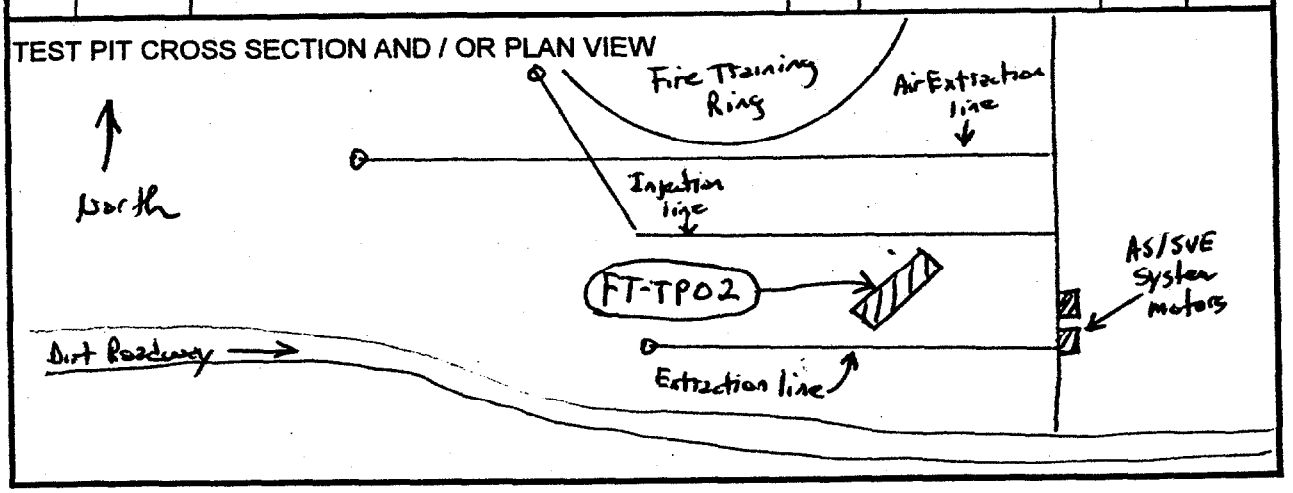
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fire Training Area
TEST PIT NUMBER: FT-TP02
DATE: 6-12-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Soil/Gas (ppm)	BZ (ppm)
0		Brown Silty fine to medium Sand with coal Frags.		(damp)	0	0
0.5		Dark Grey - Black Silty Sand with brick, concrete, wood debris		Strong Petroleum odor	241	1
3.0		Light Brown - Tan Fine to Medium Sand		Slight Petroleum odor	21.1	0
4.5		Tan-white fine to Medium Sand		Slight Petroleum odor	18.4	0
8.0		Same as above		"	17.4	0
11.5		Same as above		"	12.5	0
				could not dig any deeper due to collapsing sidewalls		

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet within Excavation
- Evidence of contamination observed from 0.5 feet Through 11.0 feet.
- Test pit dimensions → 14 feet X 3.5 feet

PHOTO LOG: NA →

- Test Pit was backfilled

TEST PIT LOG

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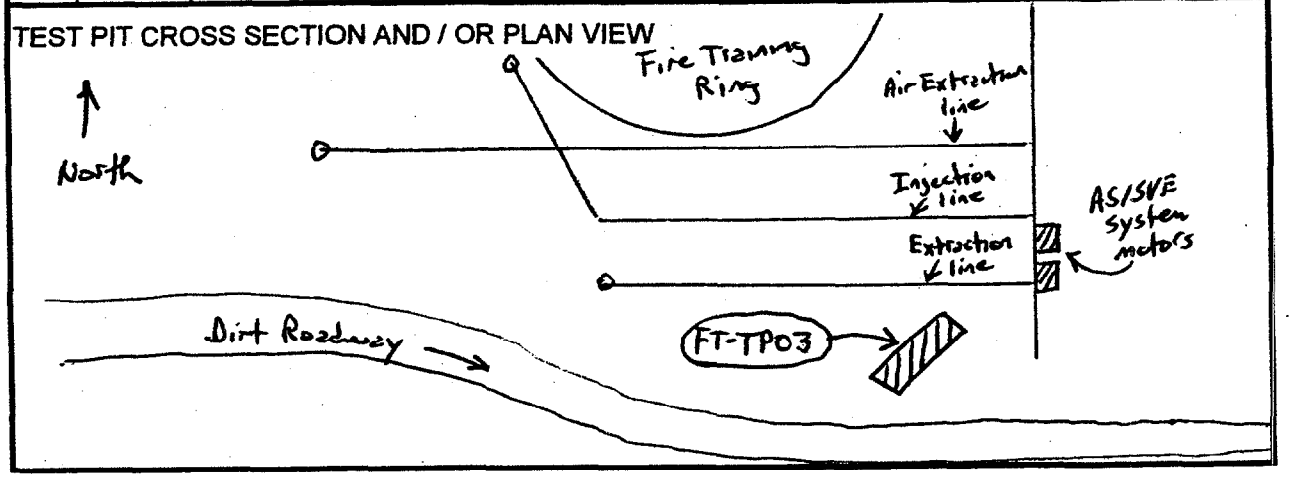
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton — TEST PIT NUMBER: FT-TP03
PROJECT NUMBER: 5563 — DATE: 6-13-01
LOCATION: Fire Training Area — GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Brown Silty Fine to Medium Sand with coal Frags		(Moist)	0	0
1.0		Dark Gray - Black Silty Fine to medium Sand with some wood debris		(wet to moist) petroleum odor	28	0
3.0		Same as above (No wood)		moist petroleum odor	54	0
4.0		Light Brown - Tan Fine to medium Sand		(moist) slight petroleum odor	16	0
6.0		Same as above		(moist)	14.0	0
9.0		Tan - white Fine to medium Sand		(moist) slight petroleum odor	12.0	0
9.5		Could not dig any deeper due to collapsing sidewalls.				

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet within Excavation
- Evidence of contamination observed from 1.0 feet through 9.0 feet.
- Test Pit dimensions → 14.5 feet x 3.5 feet.

PHOTO LOG: NA →

- Test Pit was Backfilled

TEST PIT LOG

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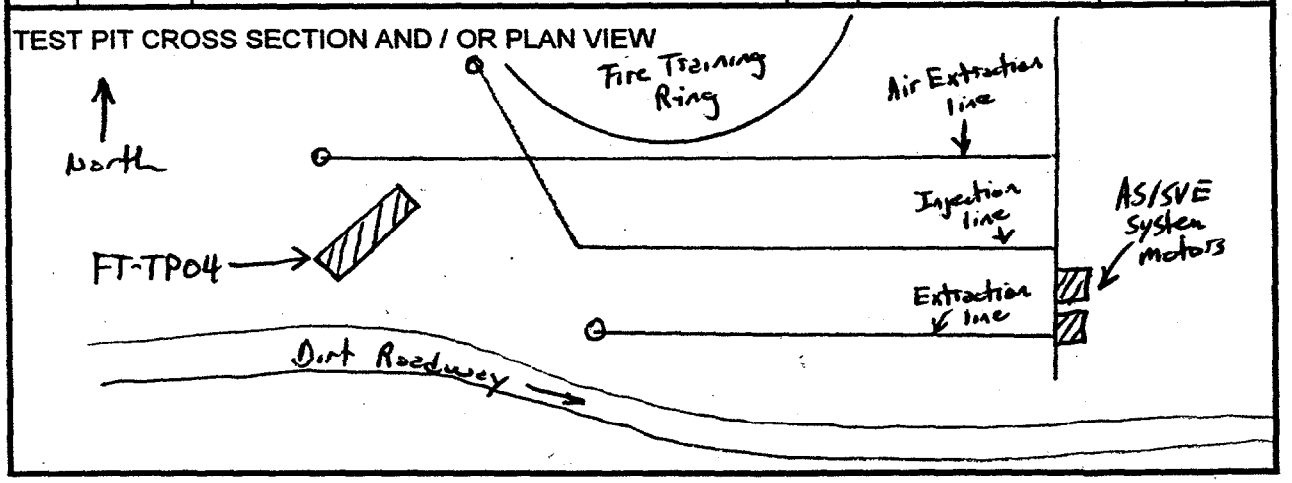
Tetra Tech NUS, Inc.

PROJECT NAME: UWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fire Training Area
TEST PIT NUMBER: FT-TP04
DATE: 6-13-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Black-Brown Silty Sand with numerous coal Frags		(damp)	0	0
1.0		Black-DarkBrown silty Sand with some wood debris / brick Frags		(moist) No apparent odor	2	0
4.5		Brown - fine to medium grain Sand		(moist) No apparent odor	0	0
5.5		Tan-white fine to medium grain Sand		(moist) No odors	0	0
7.5		Same as above		(moist) No odor	0	0
9.5		Same as above		Could not dig any deeper due To collapsing sidewalls		

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet within Excavation
- Test Pit Dimensions → 14 feet x 3.5 feet
- Test Pit was Backfilled

PHOTO LOG: NA →

TEST PIT LOG

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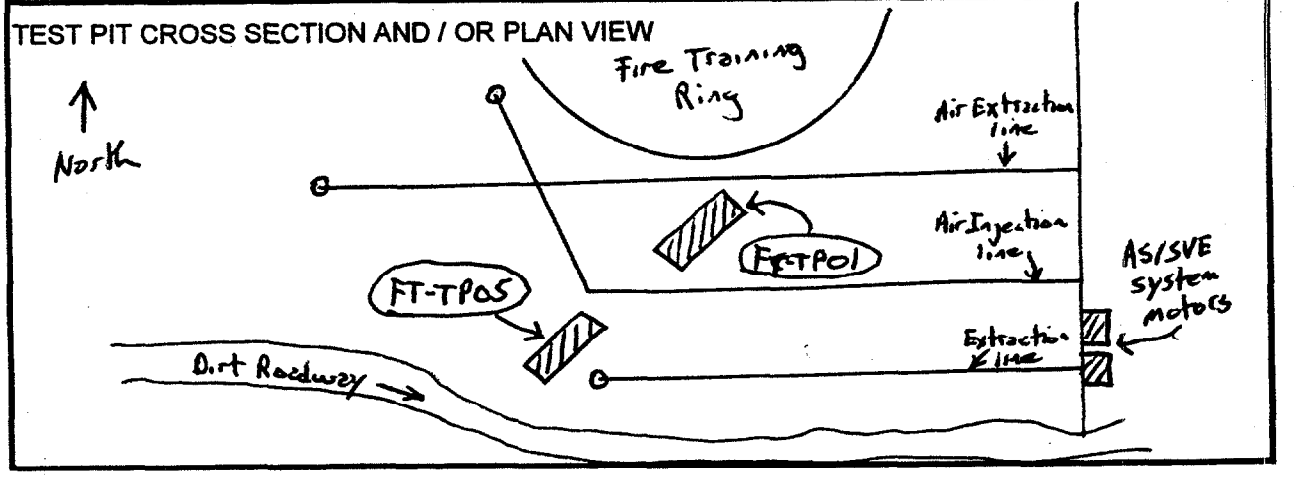
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fire Training Area
TEST PIT NUMBER: FT-TP05
DATE: 6-13-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Dark Brown - Gray Silty Sand with grass/roots and numerous coal frags		(damp)	0	0
1.0		Dark Brown - Black Silty fine to Medium grain Sand (some wood debris)		(moist) No apparent odor	0	0
2.0		Brown - Fine to Medium grain Sand		(moist) No apparent odor	0	0
3.0		Tan - white - fine to Medium grain Sand		(moist) No odors	0	0
5.5		Same as above		(moist) No odor	0	0
9.0		Same as above		Could not dig any deeper due To collapsing sidewalls.	0	0

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet within Excavation
- No evidence of contamination observed based on odors / PID readings
- Test Pit Dimensions → 15 feet x 3.5 feet

PHOTO LOG: NA →

- Test Pit was backfilled

TEST PIT LOG

Page ___ of ___

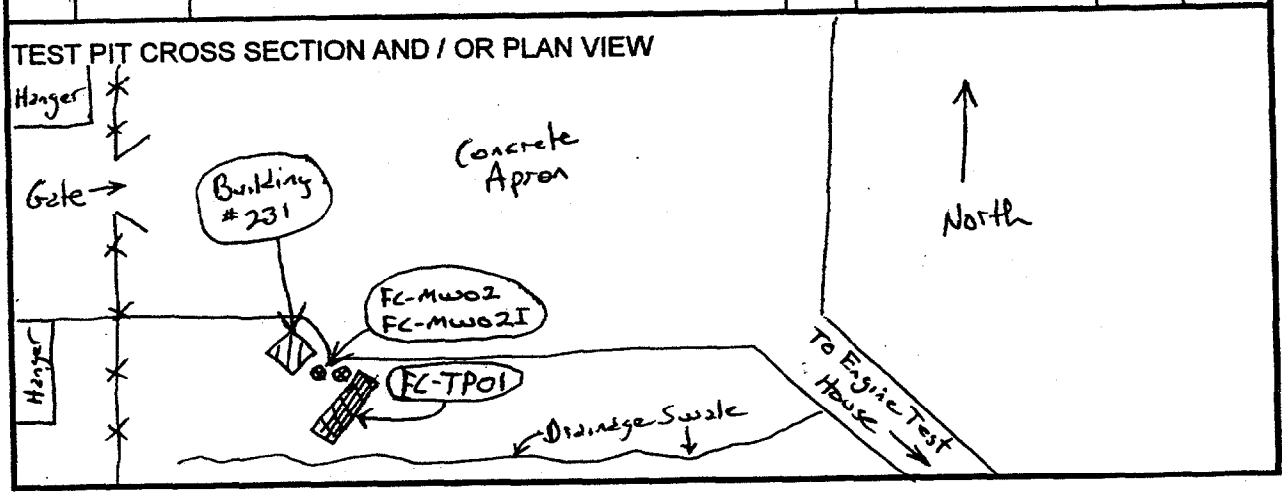
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fuel Calibration Area

TEST PIT NUMBER: FC-TP01
DATE: 6-11-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	PID/FID READIN: BZ (ppm)
0		Brown Silty Fine to medium Sand with grass + Roots		(damp)	0	0
0.5		Gray Silt - Fine to medium Sand		strong petroleum odor	48.1	0
2.0		Same as above		very strong Petroleum odor	169	0
4.0		Same as above		"	565	0
5.5		Same as above with some black Mottling		"	425	0
6.0	~~~~	Approximate water table elevation 6.0'		"	395	0
7.0		Same as above			410	0

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS:
- Horizon depths are averaged and may vary up to 0.5 feet Throughout Excavation
- Evidence of contamination observed from 0.5 feet Through 7.0 feet
- Initial Test pit Dimensions → 16 feet x 5 feet x 7 feet deep

PHOTO LOG: NA →

- Floating product observed on water table surface after ½ hour From completion
- Final Test Pit Dimensions for 2 to 1 slope →
- Test pit was left open and all soil was placed on poly sheeting. Soil pile was covered with poly sheeting.
- Pit Filled with Rain water on 6-12-01

A-6

TEST PIT LOG

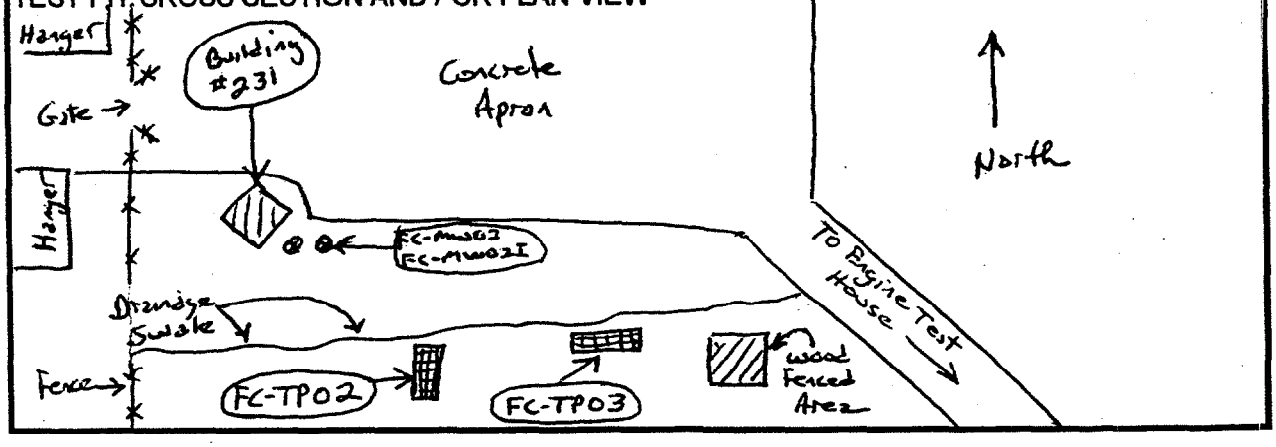
Page ___ of ___

Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fuel Calibration Area
TEST PIT NUMBER: FC-TP02
DATE: 6-11-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Brown - Tan Fine Sand Through		(damp)	0	0
		Course gravel mixture (Possible fill material)		appears to be fill material		
1.5		Same as above		(damp) No odors	0	0
3.0		Same as above		(damp) No odors	0	0
4.5		Same as above (water at ≈ 4.5 feet)		wet	0	0
5.0		Same as above		wet No odors	0	0

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS:
- Horizon depths are averaged and may vary up to 0.5 feet throughout Excavation
- No Evidence of contamination observed within Excavation
- Test Pit Dimensions → 14 Feet x 6 feet

PHOTO LOG: NA →

- This Test Pit was backfilled

TEST PIT LOG

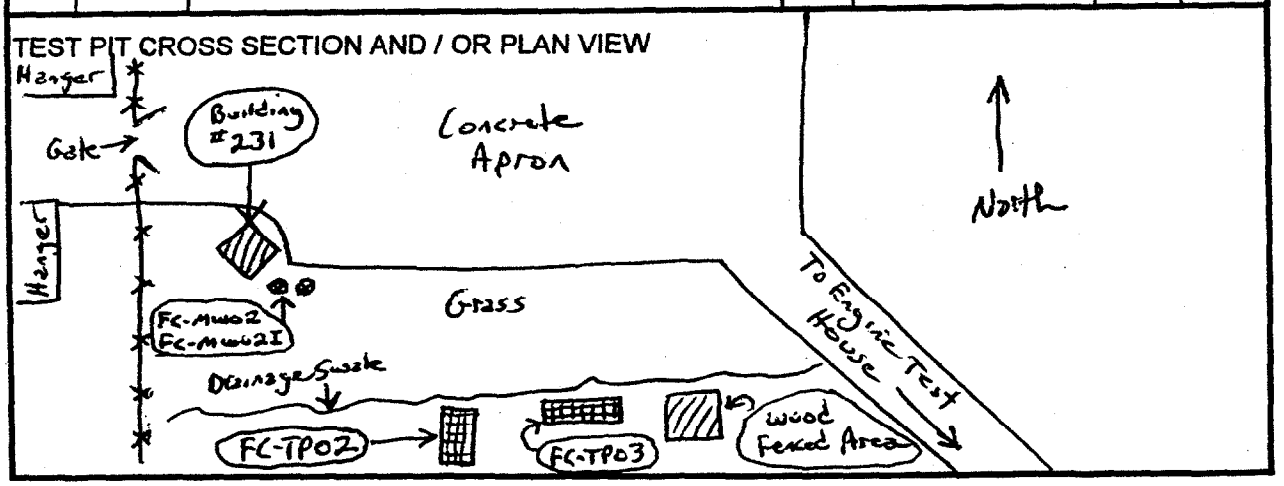
Page ___ of ___

Tetra Tech NUS, Inc.

PROJECT NAME: NAVIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fuel Calibration Area
TEST PIT NUMBER: FC-TP03
DATE: 6-11-01
GEOLOGIST: Vince Shuckra

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Soil/Core (ppm)	PID/FID READIN: BZ (ppm)
0		Dark Brown - Silty Fine to Medium grain Sand		(damp) no odors	0	0
1.6		Gray - Black - Dark Brown Sandy Silt with Trace clay and Concrete Frags.		(damp) petroleum odor	141	0
3.0		Same as above (no concrete frag)		"	258	0
		Same as above		"	302	0
5.5				very minor sheen observed on water table		
6.0		Light Brown - Tan Fine to Medium Sand		wet	108	0

TEST PIT CROSS SECTION AND / OR PLAN VIEW



REMARKS: - Horizon depths are averaged and may vary up to 0.5 feet Throughout Excavation
- Evidence of contamination observed from 1.5 feet through 6.0 feet.
- Test pit dimensions → 10 feet X 6 feet (Initial Dimensions)

PHOTO LOG: NA →

- Test Pit final Dimensions for 2X1 slope →
- Test Pit was left open and all soil was placed on poly sheeting. Soil Pile was also covered with poly sheeting

A-8

TEST PIT LOG

Page ___ of ___

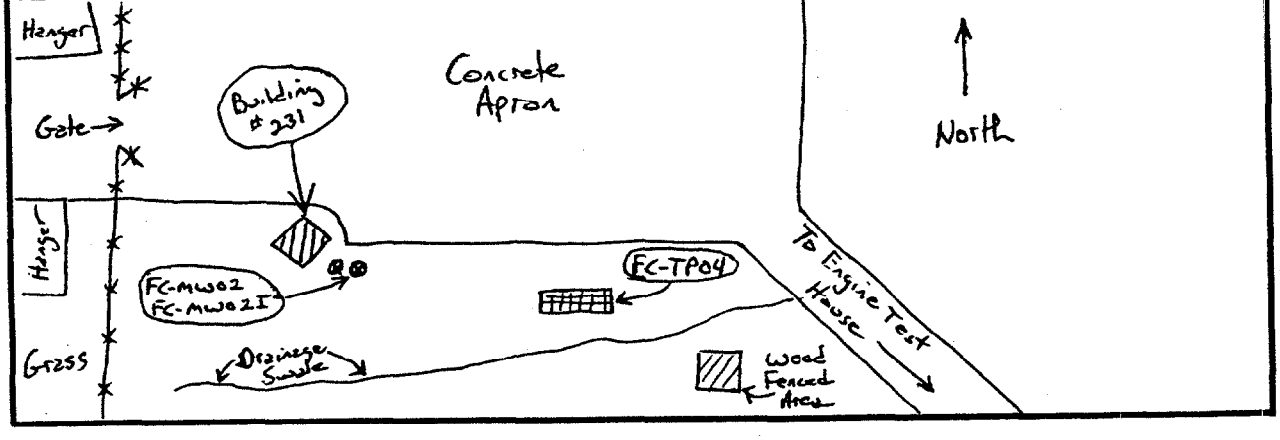
Tetra Tech NUS, Inc.

PROJECT NAME: NWIRP Calverton
PROJECT NUMBER: 5563
LOCATION: Fuel Calibration Area

TEST PIT NUMBER: FC-TP04
DATE: 6-11-01
GEOLOGIST: Vince Shickora

Depth (Ft.)	Lithology Change (Depth/Ft.)	MATERIAL DESCRIPTION: Soil/Waste Characteristics (lithology, density, color, etc.)	USCS	Remarks	PID/FID READIN: Source (ppm)	BZ (ppm)
0		Brown fine to medium Sand + Gravel		(damp)	0	0
		Grass and Roots				
1.0		Dark Gray - Black (mottled) Silty fine to		(damp)	84	0
		Medium Sand		Petroleum odor		
3.75		Same as above		(damp)		
				strong Petroleum odor	262	0
5.0		Dark Brown fine to Medium Sand		(moist)	195	0
		Approximate water table elevation 5.6' BGS		strong petroleum odor		
6.0		Same as above		(wet)	190	0
				Petroleum odor		

TEST PIT CROSS SECTION AND / OR PLAN VIEW



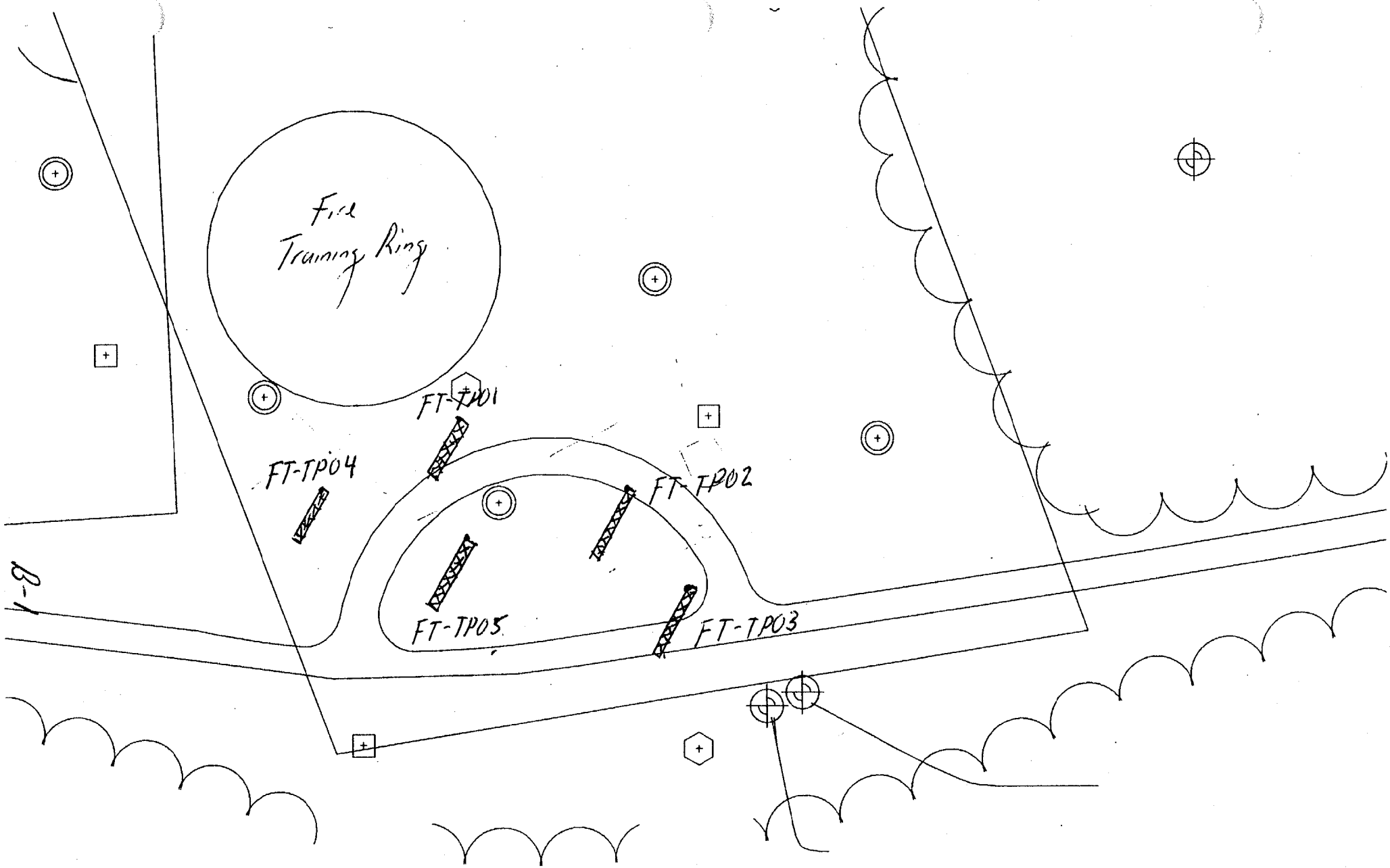
REMARKS:
- Horizon depths are averaged and may vary up to 0.5 Feet Throughout Excavation
- Evidence of contamination observed From 1.0 Feet through 6.0 Feet
- Test Pit Dimensions → 15 Feet x 4.5 Feet

PHOTO LOG: NA →

- This test pit was back filled

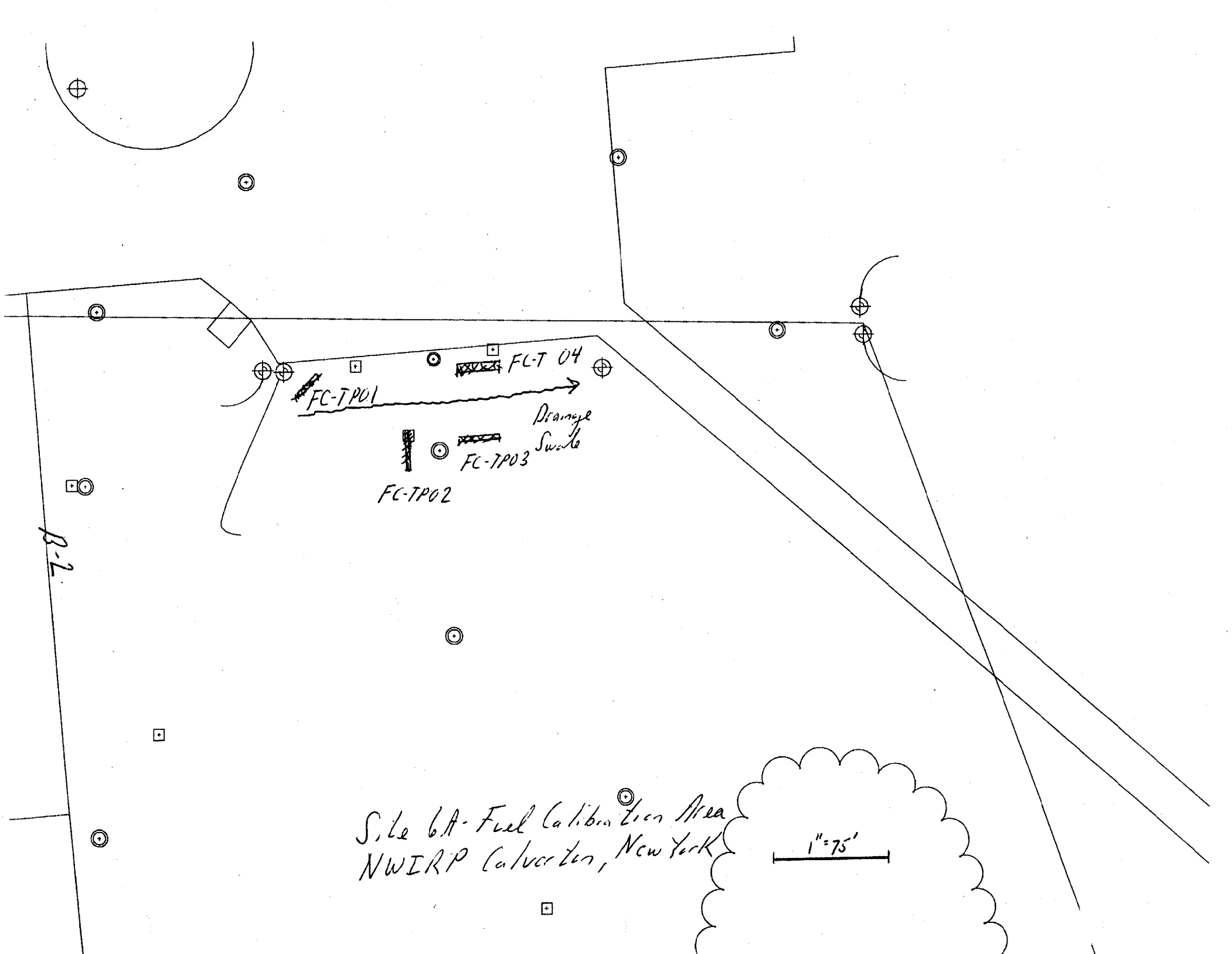
ATTACHMENT B

TEST PIT LOCATION SKETCHES



Site 2- Fire Training Area
NWIRP Calverton, New York

1"=36'


FC-TP01
FC-TP04
Drainage Swale
FC-TP03
FC-TP02
B-2
Site 6A - Fuel Calibration Area
NWIRP Calverton, New York
1" = 75'

ATTACHMENT C

CHAIN OF CUSTODY FORMS AND SAMPLE LOG SHEETS

CHEMTECH
CHAIN OF CUSTODY RECORD

☐ 110 Route 4
Englewood, NJ 07631
(201) 567-6868
Fax (201) 567-1333

☒ 205 Campus Plaza 1
Edison, NJ 08837
(732) 225-4111
Fax (732) 225-4110

CHEMTECH JOB NO.: L48346

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Tetra Tech NUS

ADDRESS: 661 Andersen Drive

CITY: Pittsburgh STATE: PA ZIP: 15220

ATTENTION: Dave Brayack

PHONE: (412) 921-8375 FAX: (412) 921-4040

PROJECT INFORMATION

PROJECT NAME: NWIRP Calverton

PROJECT NO.: 5563

PROJECT MANAGER: Dave Brayack

LOCATION:

PHONE: FAX:

BILLING INFORMATION

BILL TO: PO #:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH

** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP

☐ RESULTS + QC ☐ NYS ASP "B"

☐ NJ REDUCED ☐ NYS ASP "A"

☐ NJ CLP ☐ EDD

☐ EDD FORMAT: _____

ANALYSIS

1 Encore Samplers
2 VOCs
3 8 ounce Jar SVOCs - Pest/PCB
4 4 ounce Jar TCLP Metals (RCRA)
5
6
7
8
9

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1. 01	FT-TP01-0203	Soil		X	6-13-01	0635	5	3	1	1							
2. 02	FT-TP02-0203	Soil		X	6-13-01	0655	4	3	1								
3. 03	FC-TP01-0203	Soil		X	6-13-01	0715	4	3	1								
4. 04	FC-TP03-0304	Soil		X	6-13-01	0725	4	3	1								
5. 05	FC-Comp-01	Soil	X		6-13-01	0730	1			1							
6.																	
7.																	
8.																	

← Specify Preservatives
A – HCl B – HNO_3
C – H_2SO_4 D – NaOH
E – ICE F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	6-13-01 1200	1. FedEx
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2. FedEx	6/15/01 930	2. Steven
RELINQUISHED BY	DATE/TIME:	RECEIVED FOR LAB BY:
3.		3.

Conditions of bottles or coolers at receipt: ☑ Compliant ☐ Non-Compliant ☐ Temp. of Cooler 3.6

Comments:

Page 1 of 1

Shipment Complete: Yes No

WHITE – CHEMTECH COPY FOR RETURN TO CLIENT YELLOW – CHEMTECH COPY PINK – SAMPLER COPY

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: NWIRP Calverton
Project No.: 5563

Sample ID No.: FC-COMP-01
Sample Location: Fuel Calibration Area
Sampled By: Vince Shickora
C.O.C. No.: ___

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other: ___
[ ] QA Sample Type: ___

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date: / Time: / Method: / Monitor Reading (ppm):	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
6-13-01	0730	NA	Brown-Gray-Blk	Silty Sand (moist)
Method: Shovel and Hand Trowel				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCLP Metals	1-4 ounce Jar	1	-

OBSERVATIONS / NOTES:

Composite sample collected From Test Pit Soil piles at FC-TP01 and FC-TP03

MAP:

See Test Pit Logsheets for Map

Circle if Applicable:

MS/MSD	Duplicate ID No.:
-	-

Signature(s):

C-2

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page ___ of ___

Project Site Name: NWIRP Calverton
Project No.: 5563

Sample ID No.: FC-TP03-0304
Sample Location: Fuel Calibration Area
Sampled By: Vince Shuckhard
C.O.C. No.: —

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date: 6-13-01	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0725	approximately 4.0 feet BGS.	Black - Gray	Silty Sand (moist)
Method: Hand Trowel			
Monitor Reading (ppm): 27			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-5 gram Encore Samplers	3	—
SVOCs - Pest/PCBs	1- 8 ounce Jar	1	—

OBSERVATIONS / NOTES:

Sample collected From Southern Sidewall of Test Pit # FC-TP03

MAP:

See Test Pit Logsheets For Map.

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

C-3

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: NWIRP Calverton
Project No.: 5563

Sample ID No.: FC-TP01-0203
Sample Location: Fuel Calibration Area
Sampled By: Vince Shickora
C.O.C. No.:

[ ] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date: 6-13-01 / Time: 0715 / Method: Hand Trowel / Monitor Reading (ppm): 44	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	approximately 3.0 feet BGS.	Black-Grey	Silty Sand (moist)

COMPOSITE SAMPLE DATA:

Date: / Method: / Monitor Readings (Range in ppm):	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3-5gram Encore Samplers	3	-
SVOCs - Pest/PCB	1-8ounce Jar	1	-

OBSERVATIONS / NOTES:

Sample collected from eastern sidewall of Test Pit # FC-TP01

MAP:

See Test pit Logsheets for Map

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

VAS

C-4

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of___

Project Site Name: NWIRP Calverton
Project No.: 5563

Sample ID No.: FT-TP02-0203
Sample Location: Fire Training Area
Sampled By: Vince Shickora
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 6-13-01 Time: 0655 Method: Hand Trowel Monitor Reading (ppm): 28	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	approximately 2.5 feet BGS	Dark Gray to Black	Silty Sand (moist)

COMPOSITE SAMPLE DATA:

Date: Method: Monitor Readings (Range in ppm):	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 5gram Encore Samplers	3	-
SVOCs - Pest/PCB	1 - 8ounce Jar	1	-

OBSERVATIONS / NOTES:

Sample collected From north end of Test Pit # FT-TP02

MAP:

See Test Pit Logsheets for Map

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

Tetra Tech NUS, Inc.

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NWIRP Calverton
Project No.: 5563

Sample ID No.: FT-TP01-0203
Sample Location: Fire Training Area
Sampled By: Vince Stickofa
C.O.C. No.: ___

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other: ___
[] QA Sample Type: ___

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 6-13-01	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0635	approximately 3.0 Feet BGS	Gray - Black	Fine to medium grain Silty Sand (moist)
Method: Hand Trowel			
Monitor Reading (ppm): 55			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 5gram encore samplers	3	—
SVOCs - Pest PCB	1 - 8ounce Jar	1	-
TCLP Metals	1 - 4ounce Jar	1	-

OBSERVATIONS / NOTES:

Sample collected from sidewall of Test Pit # FT-TP01 (Eastern Wall)

MAP:

See Test Pit Logsheets For Map.

Circle if Applicable:

MS/MSD	Duplicate ID No.:
—	—

Signature(s):

ATTACHMENT D
ANALYTICAL RESULTS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5187.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 29 Date Analyzed: 6/21/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	7	U
75-01-4	Vinyl Chloride	7	U
74-83-9	Bromomethane	7	U
75-00-3	Chloroethane	7	U
75-35-4	1,1-Dichloroethene	7	U
67-64-1	Acetone	37	
75-15-0	Carbon Disulfide	7	U
75-09-2	Methylene Chloride	10	
156-60-5	trans-1,2-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	10	
78-93-3	2-Butanone	7	U
156-59-2	cis-1,2-Dichloroethene	7	U
67-66-3	Chloroform	7	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
71-43-2	Benzene	9.8	
107-06-2	1,2-Dichloroethane	7	U
79-01-6	Trichloroethene	7	U
78-87-5	1,2-Dichloropropane	7	U
75-27-4	Bromodichloromethane	7	U
108-10-1	4-Methyl-2-Pentanone	7	U
108-88-3	Toluene	280	
10061-02-6	t-1,3-Dichloropropene	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-00-5	1,1,2-Trichloroethane	7	U
591-78-6	2-Hexanone	7	U
124-48-1	Dibromochloromethane	7	U
127-18-4	Tetrachloroethene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethyl Benzene	170	
136777-61-2	m/p-Xylenes	1000	E
95-47-6	o-Xylene	310	
100-42-5	Styrene	7	U

001020

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5187.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 29 Date Analyzed: 6/21/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5184.D

Level: (low/med) LOW Date Received: 06/15/01

% Moisture: not dec. 18 Date Analyzed: 06/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	30	U
75-01-4	Vinyl Chloride	30	U
74-83-9	Bromomethane	30	U
75-00-3	Chloroethane	30	U
75-35-4	1,1-Dichloroethene	30	U
67-64-1	Acetone	300	
75-15-0	Carbon Disulfide	30	U
75-09-2	Methylene Chloride	42	
156-60-5	trans-1,2-Dichloroethene	30	U
75-34-3	1,1-Dichloroethane	30	U
78-93-3	2-Butanone	30	U
156-59-2	cis-1,2-Dichloroethene	30	U
67-66-3	Chloroform	30	U
71-55-6	1,1,1-Trichloroethane	30	U
56-23-5	Carbon Tetrachloride	30	U
71-43-2	Benzene	30	U
107-06-2	1,2-Dichloroethane	30	U
79-01-6	Trichloroethene	30	U
78-87-5	1,2-Dichloropropane	30	U
75-27-4	Bromodichloromethane	30	U
108-10-1	4-Methyl-2-Pentanone	30	U
108-88-3	Toluene	30	U
10061-02-6	t-1,3-Dichloropropene	30	U
10061-01-5	cis-1,3-Dichloropropene	30	U
79-00-5	1,1,2-Trichloroethane	30	U
591-78-6	2-Hexanone	30	U
124-48-1	Dibromochloromethane	30	U
127-18-4	Tetrachloroethene	30	U
108-90-7	Chlorobenzene	30	U
100-41-4	Ethyl Benzene	350	
136777-61-2	m/p-Xylenes	3000	
95-47-6	o-Xylene	2700	E
100-42-5	Styrene	30	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 3/90

FT-TP02-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5184.D

Level: (low/med) LOW Date Received: 06/15/01

% Moisture: not dec. 18 Date Analyzed: 06/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	30	U
79-34-5	1,1,2,2-Tetrachloroethane	30	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203DL

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02DL

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5195.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 18 Date Analyzed: 6/21/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	150	UD
75-01-4	Vinyl Chloride	150	UD
74-83-9	Bromomethane	150	UD
75-00-3	Chloroethane	150	UD
75-35-4	1,1-Dichloroethene	150	UD
67-64-1	Acetone	150	UD
75-15-0	Carbon Disulfide	150	UD
75-09-2	Methylene Chloride	150	UD
156-60-5	trans-1,2-Dichloroethene	150	UD
75-34-3	1,1-Dichloroethane	150	UD
78-93-3	2-Butanone	150	UD
156-59-2	cis-1,2-Dichloroethene	150	UD
67-66-3	Chloroform	150	UD
71-55-6	1,1,1-Trichloroethane	150	UD
56-23-5	Carbon Tetrachloride	150	UD
71-43-2	Benzene	150	UD
107-06-2	1,2-Dichloroethane	150	UD
79-01-6	Trichloroethene	150	UD
78-87-5	1,2-Dichloropropane	150	UD
75-27-4	Bromodichloromethane	150	UD
108-10-1	4-Methyl-2-Pentanone	150	UD
108-88-3	Toluene	150	UD
10061-02-6	t-1,3-Dichloropropene	150	UD
10061-01-5	cis-1,3-Dichloropropene	150	UD
79-00-5	1,1,2-Trichloroethane	150	UD
591-78-6	2-Hexanone	150	UD
124-48-1	Dibromochloromethane	150	UD
127-18-4	Tetrachloroethene	240	D
108-90-7	Chlorobenzene	150	UD
100-41-4	Ethyl Benzene	340	D
136777-61-2	m/p-Xylenes	2700	D
95-47-6	o-Xylene	2300	D
100-42-5	Styrene	150	UD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203DL

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O02DL

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5195.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 18 Date Analyzed: 6/21/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	150	UD
79-34-5	1,1,2,2-Tetrachloroethane	150	UD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5186.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 9 Date Analyzed: 6/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl Chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
67-64-1	Acetone	5.5	U
75-15-0	Carbon Disulfide	5.5	U
75-09-2	Methylene Chloride	5.8	
156-60-5	trans-1,2-Dichloroethene	5.5	U
75-34-3	1,1-Dichloroethane	12	
78-93-3	2-Butanone	5.5	U
156-59-2	cis-1,2-Dichloroethene	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	17	
56-23-5	Carbon Tetrachloride	5.5	U
71-43-2	Benzene	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U
79-01-6	Trichloroethene	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
108-10-1	4-Methyl-2-Pentanone	5.5	U
108-88-3	Toluene	5.5	U
10061-02-6	t-1,3-Dichloropropene	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
591-78-6	2-Hexanone	5.5	U
124-48-1	Dibromochloromethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethyl Benzene	5.5	U
136777-61-2	m/p-Xylenes	5.5	U
95-47-6	o-Xylene	5.5	U
100-42-5	Styrene	5.5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: 003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5186.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: not dec. 9 Date Analyzed: 6/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP03-0304

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5185.D

Level: (low/med) LOW Date Received: 06/15/01

% Moisture: not dec. 8 Date Analyzed: 06/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	27	U
75-01-4	Vinyl Chloride	27	U
74-83-9	Bromomethane	27	U
75-00-3	Chloroethane	27	U
75-35-4	1,1-Dichloroethene	27	U
67-64-1	Acetone	27	U
75-15-0	Carbon Disulfide	27	U
75-09-2	Methylene Chloride	32	
156-60-5	trans-1,2-Dichloroethene	27	U
75-34-3	1,1-Dichloroethane	27	U
78-93-3	2-Butanone	27	U
156-59-2	cis-1,2-Dichloroethene	27	U
67-66-3	Chloroform	27	U
71-55-6	1,1,1-Trichloroethane	27	U
56-23-5	Carbon Tetrachloride	27	U
71-43-2	Benzene	27	U
107-06-2	1,2-Dichloroethane	27	U
79-01-6	Trichloroethene	27	U
78-87-5	1,2-Dichloropropane	27	U
75-27-4	Bromodichloromethane	27	U
108-10-1	4-Methyl-2-Pentanone	27	U
108-88-3	Toluene	27	U
10061-02-6	t-1,3-Dichloropropene	27	U
10061-01-5	cis-1,3-Dichloropropene	27	U
79-00-5	1,1,2-Trichloroethane	27	U
591-78-6	2-Hexanone	27	U
124-48-1	Dibromochloromethane	27	U
127-18-4	Tetrachloroethene	27	U
108-90-7	Chlorobenzene	27	U
100-41-4	Ethyl Benzene	27	U
136777-61-2	m/p-Xylenes	27	U
95-47-6	o-Xylene	27	U
100-42-5	Styrene	27	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 3/90

FC-TP03-0304

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14550 Group: 5970-VOA

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E5185.D

Level: (low/med) LOW Date Received: 06/15/01

% Moisture: not dec. 8 Date Analyzed: 06/20/01

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
75-25-2	Bromoform	27	U
79-34-5	1,1,2,2-Tetrachloroethane	27	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP01-02

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062023.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 29 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
95-50-1	1,2-Dichlorobenzene	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
65794-96-9	3+4-Methylphenols	940	U
621-64-7	n-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	710	
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	170	J
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	470	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	470	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	470	U
83-32-9	Acenaphthene	84	J

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP0 ?

Matrix: (soil/water) SOIL Lab Sample ID: O01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062023.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 29 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	470	U
100-02-7	4-Nitrophenol	470	U
132-64-9	Dibenzofuran	55	J
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	86	J
100-01-6	4-Nitroaniline	470	U
534-52-1	4,6-Dinitro-2-methylphenol	470	U
86-30-6	n-Nitrosodiphenylamine	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
87-86-5	Pentachlorophenol	470	U
85-01-8	Phenanthrene	210	J
120-12-7	Anthracene	48	J
86-74-8	Carbazole	60	J
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	160	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	Bis(2-Ethylhexyl)phthalate	74	J
117-84-0	Di-n-octyl phthalate	470	U
205-99-2	Benzo(b)fluoranthene	470	U
207-08-9	Benzo(k)fluoranthene	470	U
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP01-02

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL061844.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 18 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/20/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-50-1	1,2-Dichlorobenzene	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
65794-96-9	3+4-Methylphenols	810	U
621-64-7	n-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	2500	
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	3900	E
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	410	U
131-11-3	Dimethylphthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	410	U
83-32-9	Acenaphthene	540	

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP 2

Matrix: (soil/water) SOIL Lab Sample ID: O02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL061844.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 18 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/20/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	410	U
100-02-7	4-Nitrophenol	410	U
132-64-9	Dibenzofuran	630	
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
86-73-7	Fluorene	1100	
100-01-6	4-Nitroaniline	410	U
534-52-1	4,6-Dinitro-2-methylphenol	410	U
86-30-6	n-Nitrosodiphenylamine	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	410	U
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	460	
86-74-8	Carbazole	330	J
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	3200	
129-00-0	Pyrene	3000	
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	910	
218-01-9	Chrysene	1100	
117-81-7	Bis(2-Ethylhexyl)phthalate	1100	
117-84-0	Di-n-octyl phthalate	410	U
205-99-2	Benzo(b)fluoranthene	730	
207-08-9	Benzo(k)fluoranthene	780	
50-32-8	Benzo(a)pyrene	470	
193-39-5	Indeno(1,2,3-cd)pyrene	120	J
53-70-3	Dibenzo(a,h)anthracene	43	J
191-24-2	Benzo(g,h,i)perylene	240	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203DL

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP01-02

Matrix: (soil/water) SOIL Lab Sample ID: O02DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062206.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 18 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/22/01

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	810	UD
111-44-4	bis(2-Chloroethyl)ether	810	UD
95-57-8	2-Chlorophenol	810	UD
95-50-1	1,2-Dichlorobenzene	810	UD
541-73-1	1,3-Dichlorobenzene	810	UD
106-46-7	1,4-Dichlorobenzene	810	UD
95-48-7	2-Methylphenol	810	UD
108-60-1	2,2'-oxybis(1-Chloropropane)	810	UD
65794-96-9	3+4-Methylphenols	1600	UD
621-64-7	n-Nitroso-di-n-propylamine	810	UD
67-72-1	Hexachloroethane	810	UD
98-95-3	Nitrobenzene	810	UD
78-59-1	Isophorone	810	UD
88-75-5	2-Nitrophenol	810	UD
105-67-9	2,4-Dimethylphenol	810	UD
111-91-1	bis(2-Chloroethoxy)methane	810	UD
120-83-2	2,4-Dichlorophenol	810	UD
120-82-1	1,2,4-Trichlorobenzene	810	UD
91-20-3	Naphthalene	2500	D
106-47-8	4-Chloroaniline	810	UD
87-68-3	Hexachlorobutadiene	810	UD
59-50-7	4-Chloro-3-methylphenol	810	UD
91-57-6	2-Methylnaphthalene	4200	D
77-47-4	Hexachlorocyclopentadiene	810	UD
88-06-2	2,4,6-Trichlorophenol	810	UD
95-95-4	2,4,5-Trichlorophenol	810	UD
91-58-7	2-Chloronaphthalene	810	UD
88-74-4	2-Nitroaniline	810	UD
131-11-3	Dimethylphthalate	810	UD
208-96-8	Acenaphthylene	810	UD
606-20-2	2,6-Dinitrotoluene	810	UD
99-09-2	3-Nitroaniline	810	UD
83-32-9	Acenaphthene	510	JD

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FT-TP02-0203DL

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP 2

Matrix: (soil/water) SOIL Lab Sample ID: O02DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062206.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 18 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/22/01

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	810	UD
100-02-7	4-Nitrophenol	810	UD
132-64-9	Dibenzofuran	460	JD
121-14-2	2,4-Dinitrotoluene	810	UD
84-66-2	Diethylphthalate	810	UD
7005-72-3	4-Chlorophenyl-phenylether	810	UD
86-73-7	Fluorene	810	D
100-01-6	4-Nitroaniline	810	UD
534-52-1	4,6-Dinitro-2-methylphenol	810	UD
86-30-6	n-Nitrosodiphenylamine	810	UD
101-55-3	4-Bromophenyl-phenylether	810	UD
118-74-1	Hexachlorobenzene	810	UD
87-86-5	Pentachlorophenol	810	UD
85-01-8	Phenanthrene	2800	D
120-12-7	Anthracene	380	JD
86-74-8	Carbazole	310	JD
84-74-2	Di-n-butylphthalate	810	UD
206-44-0	Fluoranthene	3400	D
129-00-0	Pyrene	2500	D
85-68-7	Butylbenzylphthalate	810	UD
91-94-1	3,3'-Dichlorobenzidine	810	UD
56-55-3	Benzo(a)anthracene	910	D
218-01-9	Chrysene	1100	D
117-81-7	Bis(2-Ethylhexyl)phthalate	1200	D
117-84-0	Di-n-octyl phthalate	810	UD
205-99-2	Benzo(b)fluoranthene	730	JD
207-08-9	Benzo(k)fluoranthene	740	JD
50-32-8	Benzo(a)pyrene	450	JD
193-39-5	Indeno(1,2,3-cd)pyrene	100	JD
53-70-3	Dibenzo(a,h)anthracene	810	UD
191-24-2	Benzo(g,h,i)perylene	810	UD

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP01-02

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062020.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 10 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
95-50-1	1,2-Dichlorobenzene	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
65794-96-9	3+4-Methylphenols	740	U
621-64-7	n-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	370	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	370	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	370	U
83-32-9	Acenaphthene	370	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP01-0203

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TPC

Matrix: (soil/water) SOIL Lab Sample ID: O03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062020.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 10 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	370	U
100-02-7	4-Nitrophenol	370	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	130	J
100-01-6	4-Nitroaniline	370	U
534-52-1	4,6-Dinitro-2-methylphenol	370	U
86-30-6	n-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	370	U
85-01-8	Phenanthrene	54	J
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	78	J
129-00-0	Pyrene	42	J
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	Bis(2-Ethylhexyl)phthalate	82	J
117-84-0	Di-n-octyl phthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP03-0304

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP01-02

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062103.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 8 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-50-1	1,2-Dichlorobenzene	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
65794-96-9	3+4-Methylphenols	720	U
621-64-7	n-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	1200	
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	2400	
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	360	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	360	U
83-32-9	Acenaphthene	360	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FC-TP03-0304

Lab Name: CHEMTECH Contract: TETRA TECH NUS,INC.

Project No.: L4834 Site: NWIRP Location: LB14540 Group: FT-TP0

Matrix: (soil/water) SOIL Lab Sample ID: O04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BL062103.D

Level: (low/med) LOW Date Received: 6/15/01

% Moisture: 8 decanted: (Y/N): N Date Extracted: 6/19/01

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/21/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	360	U
100-02-7	4-Nitrophenol	360	U
132-64-9	Dibenzofuran	260	J
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	270	J
100-01-6	4-Nitroaniline	360	U
534-52-1	4,6-Dinitro-2-methylphenol	360	U
86-30-6	n-Nitrosodiphenylamine	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	360	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

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Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**NWIRP**	**MATRIX:**	**SOIL**
Client:	**TETRA TECH NUS, INC.**	**Date Extracted:**	**6/19/2001**
Client ID:	**FT-TP01-0203**	**Ext. Batch:**	**PB 061901-02**
Lab ID:	**L4834-01**	**Date Analyzed:**	**6/21/2001**
Filename:	**2PC7798.D**	**DILUTION:**	**1**
Lab Project No:	**L4834**		
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/Kg)	QUALIFIER	MDL (ug/Kg)
12674-11-2	AROCLOR 1016	U		23
11104-28-2	AROCLOR 1221	U		23
11141-16-5	AROCLOR 1232	U		23
53469-21-9	AROCLOR 1242	U		23
12672-29-6	AROCLOR 1248	U		23
11097-69-1	AROCLOR 1254	U		23
11096-82-5	AROCLOR 1260	U		23

%SOLIDS	**71%**
Initial wt:	**30.01**
Final vol:	**10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

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Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**NWIRP**	**MATRIX:**	**SOIL**
Client:	**TETRA TECH NUS, INC.**	**Date Extracted:**	**6/19/2001**
Client ID:	**FT-TP02-0203**	**Ext. Batch:**	**PB 061901-02**
Lab ID:	**L4834-02 4X**	**Date Analyzed:**	**6/22/2001**
Filename:	**2PC7830.D**	**DILUTION:**	**4**
Lab Project No:	**L4834**		
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/Kg)	QUALIFIER	MDL (ug/Kg)
12674-11-2	AROCLOR 1016	U		81
11104-28-2	AROCLOR 1221	U		81
11141-16-5	AROCLOR 1232	U		81
53469-21-9	AROCLOR 1242	U		81
12672-29-6	AROCLOR 1248	U		81
11097-69-1	AROCLOR 1254	U		81
11096-82-5	AROCLOR 1260	750		81

%SOLIDS **82%**
Initial wt: **30.06**
Final vol: **10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

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Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**NWIRP**	**MATRIX:**	**SOIL**
Client:	**TETRA TECH NUS, INC.**	**Date Extracted:**	**6/19/2001**
Client ID:	**FC-TP01-0203**	**Ext. Batch:**	**PB 061901-02**
Lab ID:	**L4834-03**	**Date Analyzed:**	**6/21/2001**
Filename:	**2PC7800.D**	**DILUTION:**	**1**
Lab Project No:	**L4834**		
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/Kg)	QUALIFIER	MDL (ug/Kg)
12674-11-2	AROCLOR 1016	U		19
11104-28-2	AROCLOR 1221	U		19
11141-16-5	AROCLOR 1232	U		19
53469-21-9	AROCLOR 1242	U		19
12672-29-6	AROCLOR 1248	U		19
11097-69-1	AROCLOR 1254	U		19
11096-82-5	AROCLOR 1260	U		19

%SOLIDS **90%**
Initial wt: **30.02**
Final vol: **10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

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Tabulated Analytical Report
POLYCHLORINATED BIPHENYLS
EPA METHOD 8082

Project Name :	**NWIRP**	**MATRIX:**	**SOIL**
Client:	**TETRA TECH NUS, INC.**	**Date Extracted:**	**6/19/2001**
Client ID:	**FC-TP03-0304**	**Ext. Batch:**	**PB 061901-02**
Lab ID:	**L4834-04**	**Date Analyzed:**	**6/21/2001**
Filename:	**2PC7801.D**	**DILUTION:**	**1**
Lab Project No:	**L4834**		
		Analyst:	**A.A.**

CAS #	COMPOUNDS	RESULTS (ug/Kg)	QUALIFIER	MDL (ug/Kg)
12674-11-2	AROCLOR 1016	U		18
11104-28-2	AROCLOR 1221	U		18
11141-16-5	AROCLOR 1232	U		18
53469-21-9	AROCLOR 1242	U		18
12672-29-6	AROCLOR 1248	U		18
11097-69-1	AROCLOR 1254	U		18
11096-82-5	AROCLOR 1260	U		18

%SOLIDS **92%**
Initial wt: **30.04**
Final vol: **10**

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

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Tabulated Analytical Report
PESTICIDES

Project Name: NWIRP
Client: TETRA TECH NUS, INC.
Client ID: FT-TP01-0203
Lab ID: L4834-01
Filename: 4PS9710.D
Lab Project No: L4834

MATRIX: SOIL
Date extracted: 6/19/2001
Ext. Batch: PB 061901-02
Date Analyzed: 6/19/2001
Dilution: 1

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		2.3
58-89-9	gamma-BHC (Lindane)	U	U		2.3
76-44-8	Heptachlor	U	U		2.3
309-00-2	Aldrin	U	U		2.3
319-85-7	beta-BHC	U	U		2.3
319-86-8	delta-BHC	U	U		2.3
1024-57-3	Heptachlor epoxide	U	U		2.3
959-98-8	Endosulfan I	U	U		2.3
5103-71-9	gamma-Chlordane	U	U		2.3
5103-74-2	alpha-Chlordane	U	U		2.3
72-55-9	4,4'-DDE	U	U		2.3
60-57-1	Dieldrin	U	U		2.3
72-20-8	Endrin	U	U		2.3
33213-65-9	Endosulfan II	U	U		2.3
72-54-8	4,4'-DDD	U	U		2.3
50-29-3	4,4'-DDT	U	U		2.3
7421-93-4	Endrin aldehyde	U	U		2.3
1031-07-8	Endosulfan Sulfate	U	U		2.3
72-43-5	Methoxychlor	U	U		2.3
53494-70-5	Endrin ketone	U	U		2.3
8001-35-2	Toxaphene	U	U		23

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 71%
Initial wt/vol 30.05
Final vol: 10

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Tabulated Analytical Report
PESTICIDES

Project Name: NWIRP
Client: TETRA TECH NUS, INC.
Client ID: FT-TP02-0203
Lab ID: L4834-02
Filename: 4PS9711.D
Lab Project No: L4834

MATRIX: SOIL
Date extracted: 6/19/2001
Ext. Batch: PB 061901-02
Date Analyzed: 6/19/2001
Dilution: 1

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		2.0
58-89-9	gamma-BHC (Lindane)	U	U		2.0
76-44-8	Heptachlor	U	U		2.0
309-00-2	Aldrin	U	U		2.0
319-85-7	beta-BHC	U	U		2.0
319-86-8	delta-BHC	U	U		2.0
1024-57-3	Heptachlor epoxide	U	U		2.0
959-98-8	Endosulfan I	U	U		2.0
5103-71-9	gamma-Chlordane	U	U		2.0
5103-74-2	alpha-Chlordane	U	U		2.0
72-55-9	4,4'-DDE	U	U		2.0
60-57-1	Dieldrin	U	U		2.0
72-20-8	Endrin	U	U		2.0
33213-65-9	Endosulfan II	U	U		2.0
72-54-8	4,4'-DDD	U	U		2.0
50-29-3	4,4'-DDT	U	U		2.0
7421-93-4	Endrin aldehyde	U	U		2.0
1031-07-8	Endosulfan Sulfate	U	U		2.0
72-43-5	Methoxychlor	U	U		2.0
53494-70-5	Endrin ketone	U	U		2.0
8001-35-2	Toxaphene	U	U		20

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 82%
Initial wt/vol 30.01
Final vol: 10

Tabulated Analytical Report
PESTICIDES

Project Name: NWIRP
Client: TETRA TECH NUS, INC.
Client ID: FC-TP01-0203
Lab ID: L4834-03
Filename: 4PS9712.D
Lab Project No: L4834

MATRIX: SOIL
Date extracted: 6/19/2001
Ext. Batch: PB 061901-02
Date Analyzed: 6/19/2001
Dilution: 1

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		1.9
58-89-9	gamma-BHC (Lindane)	U	U		1.9
76-44-8	Heptachlor	U	U		1.9
309-00-2	Aldrin	U	U		1.9
319-85-7	beta-BHC	U	U		1.9
319-86-8	delta-BHC	U	U		1.9
1024-57-3	Heptachlor epoxide	U	U		1.9
959-98-8	Endosulfan I	U	U		1.9
5103-71-9	gamma-Chlordane	U	U		1.9
5103-74-2	alpha-Chlordane	U	U		1.9
72-55-9	4,4'-DDE	U	U		1.9
60-57-1	Dieldrin	U	U		1.9
72-20-8	Endrin	U	U		1.9
33213-65-9	Endosulfan II	U	U		1.9
72-54-8	4,4'-DDD	U	U		1.9
50-29-3	4,4'-DDT	U	U		1.9
7421-93-4	Endrin aldehyde	U	U		1.9
1031-07-8	Endosulfan Sulfate	U	U		1.9
72-43-5	Methoxychlor	U	U		1.9
53494-70-5	Endrin ketone	U	U		1.9
8001-35-2	Toxaphene	U	U		19

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 90%
Initial wt/vol 30.03
Final vol: 10

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Tabulated Analytical Report
PESTICIDES

Project Name: NWIRP
Client: TETRA TECH NUS, INC.
Client ID: FC-TP03-0304
Lab ID: L4834-04
Filename: 4PS9713.D
Lab Project No: L4834

MATRIX: SOIL
Date extracted: 6/19/2001
Ext. Batch: PB 061901-02
Date Analyzed: 6/19/2001
Dilution: 1

Analyst: A.A.

CAS #	COMPOUNDS	RESULTS (ug/Kg) PRIMARY	RESULTS (ug/Kg) CONFIRMATION	Q	MDL MDL(ug/Kg)
319-84-6	alpha-BHC	U	U		1.8
58-89-9	gamma-BHC (Lindane)	U	U		1.8
76-44-8	Heptachlor	U	U		1.8
309-00-2	Aldrin	U	U		1.8
319-85-7	beta-BHC	U	U		1.8
319-86-8	delta-BHC	U	U		1.8
1024-57-3	Heptachlor epoxide	U	U		1.8
959-98-8	Endosulfan I	U	U		1.8
5103-71-9	gamma-Chlordane	U	U		1.8
5103-74-2	alpha-Chlordane	U	U		1.8
72-55-9	4,4'-DDE	U	U		1.8
60-57-1	Dieldrin	U	U		1.8
72-20-8	Endrin	U	U		1.8
33213-65-9	Endosulfan II	U	U		1.8
72-54-8	4,4'-DDD	U	U		1.8
50-29-3	4,4'-DDT	U	U		1.8
7421-93-4	Endrin aldehyde	U	U		1.8
1031-07-8	Endosulfan Sulfate	U	U		1.8
72-43-5	Methoxychlor	U	U		1.8
53494-70-5	Endrin ketone	U	U		1.8
8001-35-2	Toxaphene	U	U		18

MDL = METHOD DETECTION LIMIT
U =UNDETECTED BELOW THE MDL
B = PRESENT IN THE ASSOCIATED BLANK
E = EXCEEDED CALIBRATION RANGE, DILUTION TO FOLLOW
D = DILUTION

%SOLIDS 92%
Initial wt/vol 30.06
Final vol: 10

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FT-TP01-0203

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: L4834

Matrix (soil/water): TCLPEXTRACT Lab Sample ID: L4834-01 S

Level (low/med): LOW Date Received: 06/15/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	25.0	U		P
7440-39-3	Barium	4140			P
7440-43-9	Cadmium	4.0	U		P
7440-47-3	Chromium	8.0	U		P
7439-92-1	Lead	25.0	U		P
7439-97-6	Mercury	2.0	U		CV
7782-49-2	Selenium	32.0	U		P
7440-22-4	Silver	13.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FC-COMP-01

Lab Name: CHEMTECH EDISON Contract: 68-W00-088

Lab Code: CHEMED Case No.: SAS No.: SDG No.: L4834

Matrix (soil/water): TCLPEXTRACT Lab Sample ID: L4834-05 S

Level (low/med): LOW Date Received: 06/15/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	25.0	U		P
7440-39-3	Barium	2790			P
7440-43-9	Cadmium	4.0	U		P
7440-47-3	Chromium	8.0	U		P
7439-92-1	Lead	25.0	U		P
7439-97-6	Mercury	2.0	U		CV
7782-49-2	Selenium	32.0	U		P
7440-22-4	Silver	13.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: